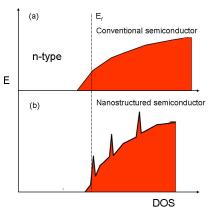
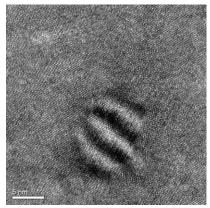


Revolutionary Materials for Energy Conversion Donald T. Morelli (Michigan State University)

The Center for Revolutionary Materials for Energy Conversion will focus on the fundamental science of thermoelectricity. It will combine experimental, theoretical, and computational approaches to synthesize, characterize, and understand the nature of the thermoelectric energy conversion process.





RESEARCH PLAN AND DIRECTIONS

Challenges: create "contraindicated" properties in solids

Approaches: synthesis of novel structures, compounds, and alloys;

computational and theoretical investigations

Uniqueness: nanoscience, self-assembly of nanostructures, laser-enhanced

tomography of nanostructure, first-principles calculations

Outcomes: deeper understanding of thermoelectric energy conversion



